



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,565	03/17/2004	Young-Nam Kim	IK-0084	1905

34610 7590 09/21/2006

FLESHNER & KIM, LLP  
P.O. BOX 221200  
CHANTILLY, VA 20153

EXAMINER
----------

ING, MATTHEW W

ART UNIT	PAPER NUMBER
----------	--------------

3637

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/801,565

Applicant(s)

KIM, YOUNG-NAM

Examiner

Matthew W. Ing

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-11 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 27 October 2005.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 17 March 2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 104b' (see the right-hand side of Figure 4).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

Art Unit: 3637

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Objections***

4. Claim 6 objected to because of the following informalities: the use of the word "guide" in a grammatically incorrect manner. The examiner recommends changing the word "guide", between the words "and" and "movement", to "guides"; and adding a comma between the words "rail" and "and". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Regarding Claims 1 and 5, the preambles of said claims, which read as follows, “A drawer type door opening/closing structure for a refrigerator...” implies a type of refrigerator door or drawer. However, one limitation of each claim reads “a storage space formed in a refrigerator body...”, which implies that the claim encompasses the entire refrigerator casing, to include the drawer-type door upon which the claim language subsequently focuses. This language renders these claims indefinite, since it fails to clearly indicate whether or not the claims are directed to a drawer-type refrigerator door, or the entire refrigerator casing of which said door is a component. For the purposes of examination, the examiner is considering the

Art Unit: 3637

claims to be directed to the drawer-type door, with the term "a refrigerator body" included merely for illustrative purposes.

8. Regarding claim 9, the term "the tilting door" in line 3 lacks antecedent basis in the claim.

9. Claims 2-4 and 6-8 are considered indefinite because they depend from indefinite base claims.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

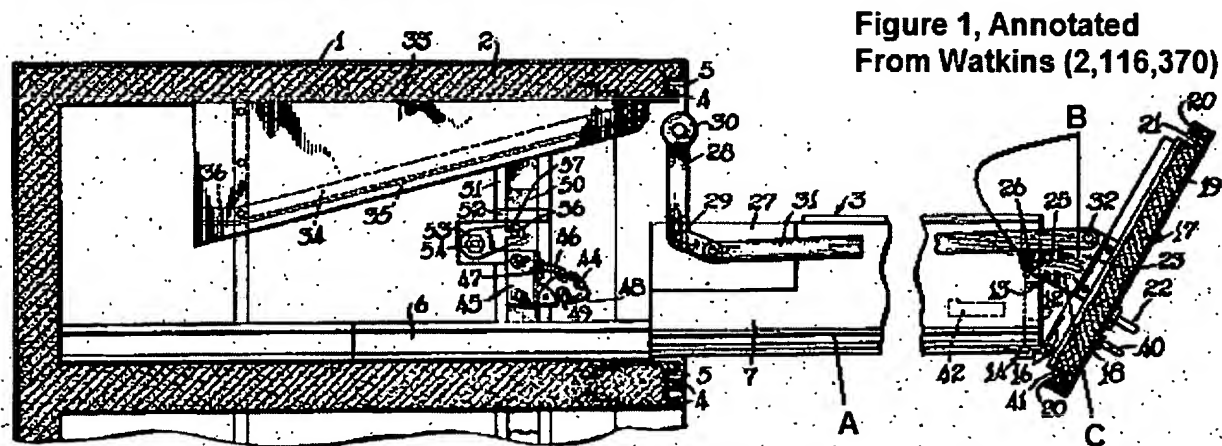
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-2, 4-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Watkins (2,116,370).

12. Regarding Claim 1, Watkins teaches a structure comprising: a door (17) configured to selectively open and close a storage space in a refrigerator body (1), by being drawn out and pushed into the refrigerator body in a manner in which a drawer is moved, the door being capable of being pivoted about a lower end of the door (see Figure 1); at least one support frame (7) hingedly connected (16) to a rear surface of the door thereby creating a hinge connection (16) to allow the door (17) to pivot about the lower end of the door (17) and inherently capable of having a storage box for storing an object to be seated behind the door (see Figure 1); at least one movable rail (Item A of Figure 1, Annotated) formed on the support frame (7) and configured to be engaged with at least one guide rail (6) formed on an inner surface of a side wall of the

Art Unit: 3637

refrigerator body (1) and guide movement of the at least one support frame (see column 2, lines 3-4); and at least one cover bracket (i.e., the portion of Item 23 below Item 25 - Item C in Figure 1 Annotated) protruding backward from the rear surface of the door (17) and configured to cover a gap between the support frame (7) and the rear surface of the door (17) and the hinge connection (16). The examiner points out that the drawer-type door in the structure of Watkins is inherently capable of allowing an appropriately-size storage box to be seated behind the door. The examiner also points out that the phrase “refrigerator body” can encompass any insulated structure that is capable of holding items typically stored in refrigerators (e.g., meats, fruits, vegetables, eggs, frozen dinners, etc.). The examiner also points out that the cover bracket (C) of Watkins covers at least a portion of the triangular gap between the support frame (7), the rear surface of the door (17), and the hinge connection (16).



13. Regarding claim 2, in the structure of Watkins, the cover bracket (C) is located outside of the support frame (7) when the door (17) stands upright. See Figures 2-3.

14. Regarding claim 4, Watkins teaches a structure wherein the door (17) further includes at least one tilting latch formed at one side of the rear surface of the door (17), the door having a

Art Unit: 3637

lower end hingedly assembled (16) with the support frame (7), the tilting latch having a latch jaw (i.e., those portions of Item 23 located behind and above Item 25 - designated as Item B in Figure 1 Annotated) and the support frame (7) having a stopper pin (26), wherein the latch jaw (B) and the stopper pin (26) can be engaged with each other to limit a range within which the door can be pivoted (see Figures 1 and 3).

15. Regarding Claim 5, Watkins teaches a structure comprising: a door (17) configured to selectively open and close a storage space in a refrigerator body (1), by being drawn out and pushed into the refrigerator body in a manner in which a drawer is moved, the door being capable of being pivoted about a lower end of the door (see Figure 1); at least one support frame (7) hingedly connected (16) to a rear surface of the door thereby creating a hinge connection (16) to allow the door (17) to pivot about the lower end of the door (17) and inherently capable of having a storage box for storing an object to be seated behind the door (see Figure 1); and at least one cover bracket (i.e., the portion of Item 23 below Item 25 - Item C in Figure 1 Annotated) protruding backward from the rear surface of the door (17) and configured to cover a gap between the support frame (7) and the rear surface of the door (17) and the hinge connection (16); said cover bracket (C) being located outside of the support frame (7) when the door (17) stands upright (see Figures 2-3). The examiner points out that the drawer-type door in the structure of Watkins is inherently capable of allowing an appropriately-size storage box to be seated behind the door. The examiner also points out that the phrase "refrigerator body" can encompass any insulated structure that is capable of holding items typically stored in refrigerators (e.g., meats, fruits, vegetables, eggs, frozen dinners, etc.). The examiner also points

Art Unit: 3637

out that the cover bracket (C) of Watkins covers at least a portion of the triangular gap between the support frame (7), the rear surface of the door (17), and the hinge connection (16).

16. Regarding claim 6, the structure of Watkins includes at least one movable rail (Item A of Figure 1, Annotated) formed on the support frame (7); and at least one guide rail (6) formed on an inner surface of a side wall of the refrigerator body (1), wherein the guide rail (6) is engaged with the movable rail (A), and guides movement of the support frame (see column 2, lines 3-4).

17. Regarding claim 7, in the structure of Watkins, the cover bracket (C) is located outside of the support frame (7) when the door stands upright. See Figures 2-3.

18. Regarding claim 9, Watkins teaches a structure wherein the door (17) further includes at least one tilting latch formed at one side of the rear surface of the door (17), the door having a lower end hingedly assembled (16) with the support frame (7), the tilting latch having a latch jaw (i.e., those portions of Item 23 located behind and above Item 25 - designated Item B in Figure 1 Annotated) and the support frame (7) having a stopper pin (26), wherein the latch jaw (B) and the stopper pin (26) can be engaged with each other to limit a range within which the door can be pivoted (see Figures 1 and 3).

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Art Unit: 3637

20. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

21. Claims 10 and 11, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Meek (2,711,944) in view of Watkins (2,116,370).

22. Meek teaches the structure substantially as claimed, including a refrigerator body (10); a door (25) configured to selectively open and close a storage space in the refrigerator body (10), by being drawn out and pushed into the refrigerator body (10) in a manner in which a drawer is moved (see Figure 2); at least one support frame (31) that is inherently capable of having a storage box for storing an object to be seated behind the door (see Figure 2); at least one movable rail (80) formed on the support frame and configured to be engaged with at least one guide rail (63) formed on an inner surface of a side wall of the refrigerator body (10) to guide movement of the support frame (see Figure 4).

23. The only difference between structure of Meek and the invention as claimed is that, Meek fails to teach a door capable of being pivoted about a lower end of the door; at least one support frame hingedly connected to a rear surface of the door thereby creating a hinge connection to allow the door to pivot about the lower end of the door and inherently capable of having a storage box for storing an object to be seated behind the door; and at least one cover bracket

protruding backward from the rear surface of the door and configured to cover a gap between the support frame and the rear surface of the door and the hinge connection.

24. Watkins, however, teaches a door (17) capable of being pivoted about a lower end of the door (see Figure 1); at least one support frame (7) hingedly connected (16) to a rear surface of the door thereby creating a hinge connection (16) to allow the door (17) to pivot about the lower end of the door (17) and inherently capable of having a storage box for storing an object to be seated behind the door (see Figure 1); and at least one cover bracket (i.e., the portion of Item 23 below Item 25 - Item C in Figure 1 Annotated) protruding backward from the rear surface of the door (17) and configured to cover a gap between the support frame (7) and the rear surface of the door (17) and the hinge connection (16). The examiner points out that the cover bracket (C) of Watkins covers at least a portion of the triangular gap between the support frame (7), the rear surface of the door (17), and the hinge connection (16).

25. It would have been obvious to one of ordinary skill in the art to replace the door in the structure of Meek with the pivoting door taught by Watkins in order to allow objects to be more easily positioned within, and removed from the refrigerator, thereby providing the structure substantially as claimed.

26. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meek (2,711,944) in view of Watkins (2,116,370) and Jenkins (5,487,239). Meek and Watkins teach the structure substantially as claimed above, including a drawer-type refrigerator door wherein said door is capable of being pivoted about the lower end of said door, the only difference being Meek and Watkins fail to teach a door basket for storing an object, said door basket being disposed at an upper portion of the rear surface of the refrigerator door. Jenkins, however,

Art Unit: 3637

teaches the inclusion of a door basket (46) for storing an object, said door basket being disposed at an upper portion of the rear surface of the refrigerator door. It would have been obvious to one of ordinary skill in the art to incorporate the door basket of Jenkins into the door of the structure of Meek as modified by Watkins in order to provide a space for storing butter or eggs, thereby providing the structure substantially as claimed.

### ***Response to Arguments***

27. Applicant's arguments with respect to the drawing and specification objections and are persuasive except with respect to the objection regarding the reference character 104b' in Figure 4, which objection the applicant fails to address. The remainder of the objections to the drawings, along with the objections to the specification, have been withdrawn.

28. Applicant's arguments with respect to the 35 USC 112 rejections have been considered and are persuasive. Accordingly, the rejections under 35 USC 112 have been withdrawn.

29. It is noted that applicant has amended claims 4 and 9 such that the limitation, "having a lower end hingedly assembled with the support frame", applies to the door and not the tilting latch. Whereas, as discussed above, the patent of Watkins (2,116,370) teaches this type of structure, these claims have therefore been rejected under 35 U.S.C. 102(b) as being anticipated by Watkins.

### ***Conclusion***

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baker (6,055,823) and Reed (6,935,712) teach the inclusion of door baskets in the upper portion of a refrigerator door. Tovar (5,947,573), Kahn (2,132,737), Straubel (2,648,585), and Root (3,105,977) teach drawers with pivoting front ends. Banicevic (2002/0153816),

Art Unit: 3637

Wilkins (5,040,856), Kawahara (4,751,826), Koons (6,971,730), and Kaiser (6,641,239) teach the use of drawer-type doors on refrigerators. Choi (2004/0100168) and DE3221073 also a cover bracket for a tilting door. Fry (3,250,267) also teaches a latch jaw.

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Ing whose telephone number is (571) 272-6536. The examiner can normally be reached on Monday through Friday, 7:30 am - 4:00 pm.

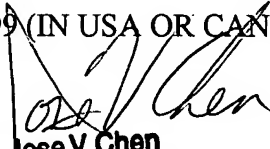
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWI

8 September 2006

  
Jose V. Chen  
Primary Examiner